

REMARKS

Amendments

Prior to this amendment, Claims 1-9 were pending, including independent Claim 1. After entry of this amendment, including new Claims 10-18, Claims 1-18 are pending, including independent Claims 1 and 10.

No new matter is added by the present amendment. Amendments to Claims 1, 5 and 7-9 are supported by the corresponding claims as originally filed, and merely serve to enhance clarity.

In section 3 of the current Office Action the Examiner rejected Claim 1 under 35 USC 112 because of the recitation "Further processing the reduced length frame in a digital communication system." To obviate this grounds for rejection, the offending recitation has been deleted from clause (c) of Claim 1, where it previously formed a positive limitation to further processing of the frame. However, clause (b) of Claim 1 as currently amended now recites in part "frame of length N for processing in a digital communications system." Thus, instead of presentation as a positive method step limitation, the new frame is now merely prepared "for" processing in a digital communications system.

In response to the Examiner's question as to how the Applicant further processes the reduced length frame in such a system, attention is directed to FIGURE 1. The puncturing takes place in block 147 (see page 6 lines 18-25), resulting in a reduced length frame. All of the subsequent processing blocks indicate examples of further processing of the reduced length frame in a digital communications system, including interleaving in block 145, modulation and demodulation in block 142, *etc.* Note that, as an example, Claim 9 as originally filed explicitly recited the step of "interleaving the reduced length frame" as a further processing step. (However, the recitation that it was a further processing step was redundant, and accordingly was removed to enhance clarity by removing unnecessary wording.)

The Applicant respectfully replies in the negative to the Examiner's query as to whether the Applicant has left out necessary steps.

The Examiner pointed out several antecedent basis problems, which have been corrected by appropriate amendments to Claims 1, 7 and 8.

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New claims 10-18 are supported primarily by the claims as originally filed, and also throughout Applicant's specification. It is believed that most of the support is readily evident. However, particular note is made that support for Claim 15 may be found, for example, between page 6 line 23 – page 7 line 7.

The steps of the method taught by the Applicant require modest mathematical representation. In the new claims, variables that may vary within a particular frame are represented with lower case italics, while values that are determined once for a particular frame, and may therefore be considered "constants" for purposes of reducing a particular frame length, are represented with upper case letters, with or without subscripts. Acronyms have been employed for "Punctured Bits" (PBs) and "Nonpunctured Bits" (NPBs), in order to reduce the volume of words. The number of PBs associated with distance of length A is shown as N_{dA} , while N_{dB} is the number of PBs having distance B (supported by, e.g., P_D , P_{D+1} on pages 6-7).

It is respectfully submitted that the new claims are allowable for much the same reasons that the Examiner set forth in his statement of reasons for allowance.

Conclusion

In view of the foregoing remarks and amendments, it is respectfully submitted that each claim, as presently pending in the present application, is in condition for immediate allowance. As such, the Examiner is respectfully requested to withdraw each of his grounds for rejection, and to promptly issue a Notice of Allowance in respect of all pending claims.

The Commissioner is authorized to construe this paper as including a petition to extend the period for response by the number of months necessary to make this paper timely filed. Fees or deficiencies required to cause the response to be complete and timely filed may be charged, and any overpayments should be credited, to our Deposit Account No. 50-0490.

Respectfully submitted,

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